EXHIBIT B

Server Node Proposal
Prowler - MegaSPARC

Version 0.2.4

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SME & SunLabs Networking and Security Colaboration

☀ Sun
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THE NETWORK IS THE COMPUTER

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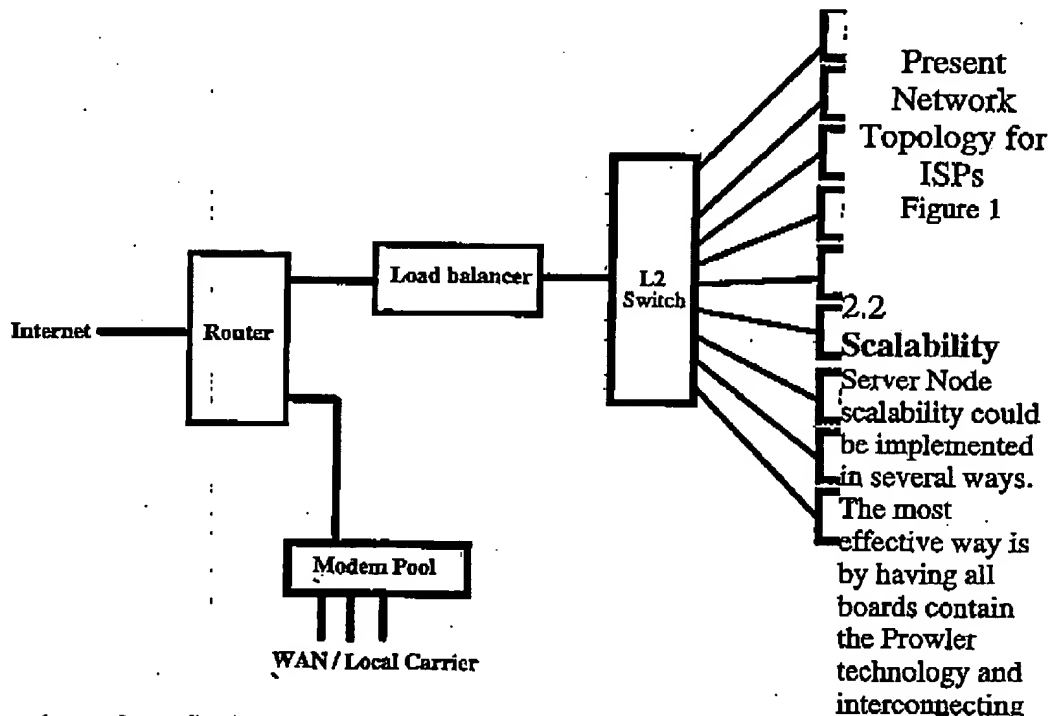Palo Alto, CA 94303 USA
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2.0 Market Opportunity

Internet Service Providers are finding that by building server farms out of multiple small servers of one or two processors and front ending them with load balancing they have the agility to scale up or shift their capacity as demand requires. In addition by grouping machines to provide a single service if one machine fails the service is still available only at a reduced capacity. These businesses are growing a rapid rate so they are being challenged to expand their physical space to keep pace. Therefore, solutions that provide more servers per square inch of rack space will help them scale up and reduce their facilities overhead costs.

2.1 Integrated Networking

Combining the compute density provided by the MegaSPARC processor with Prowler's advanced networking capabilities on a single board enables servers to be interconnected with multiple links in a mesh type configuration. This mesh topology provides several significant improvements over the way servers are currently being interconnected.
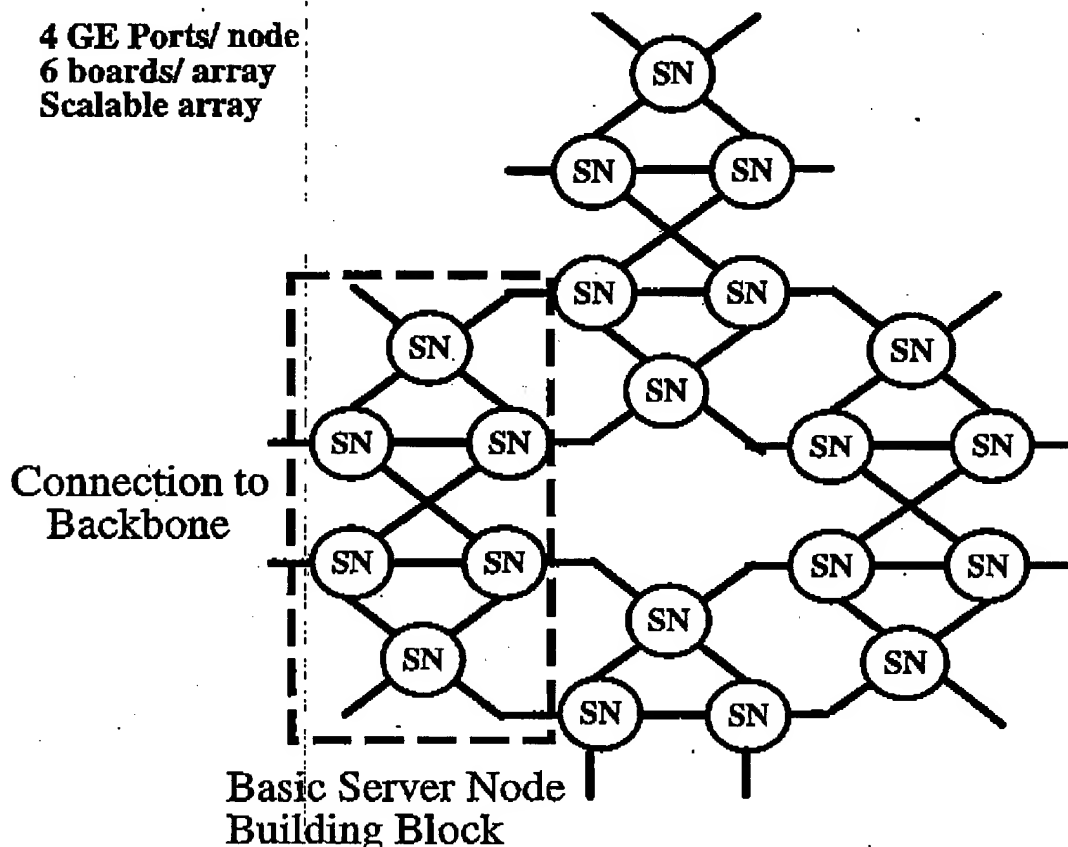
Currently the majority of ISP's build server farms using layer two Ethernet and FastEthernet switches in a flat topology. When they reach the last port in the switch box they must add another switch box or chasis. The switch is only one building block required to provide the necessary network infrastructure. Also needed is load balancers and routers to interconnect IPv4 subnets or connect to the Wide Area Network (WAN) or Modem equipment.

Present Network Topology for ISPs
Figure 1

2.2 Scalability

Server Node scalability could be implemented in several ways. The most effective way is by having all boards contain the Prowler technology and interconnecting them in a mesh topology. In this way you can interconnect groups of processor boards together with Prowler's four GigabitEthernet links. A basic building block with up to 12 processors forms a tight group of 6 Server Nodes. This basic building block can than be interconnected so that it scales to networks in the hundreds of Server Nodes. With each node having load balancing capability traffic would be directed to the Server Node which can provide the fastest response.

Because routing is built into Prowler no additional boxes are required for this function. Prowler can provide routing to other servers or to the WAN connection boxes. If the WAN connection is GigabitEthernet based then direct connection can be made to the WAN.

4 GE Ports/ node
6 boards/ array
Scalable array

Connection to
Backbone

Basic Server Node
Building Block

Sever Node Network Topology
Figure 2

2.3 Availability

This mesh like topology provides an ideal network topology to provide excellent fault tolerance. With built in routing and load balancing each Server Node can monitor its neighbors and reroute traffic around any node that goes down or needs to be taken off line to service. This ability is a biproduct of the mesh topology so your high availability is not provided by complex hardware redundancy schemes which have their own set of problems. Link failover is also built in and the routing can redirect traffic around any failed link.